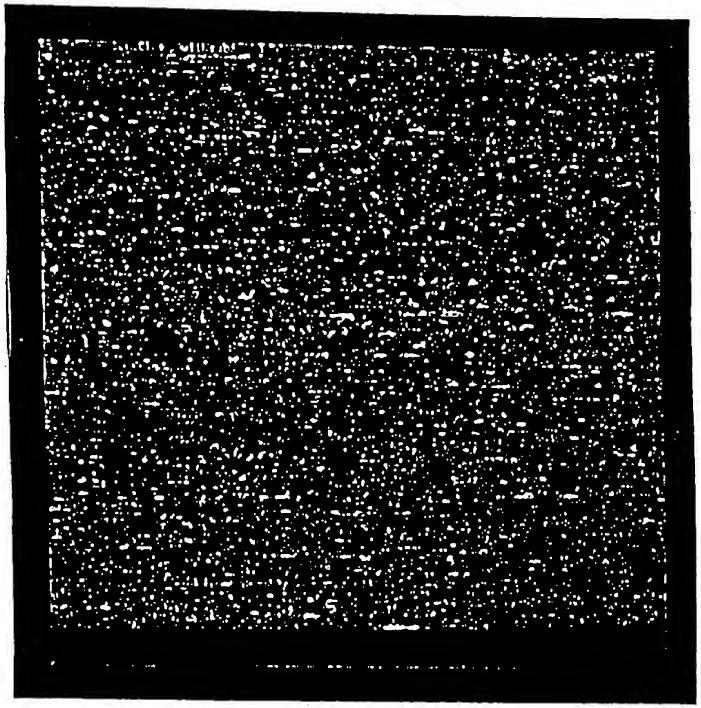
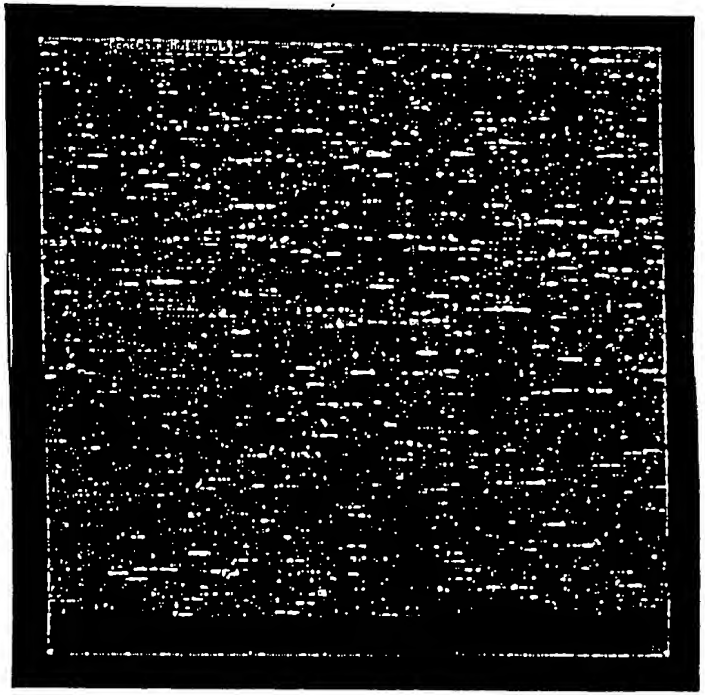
Gene Expression in Main Olfactory Epithelium



Murine 11KsubA
P% = 35%

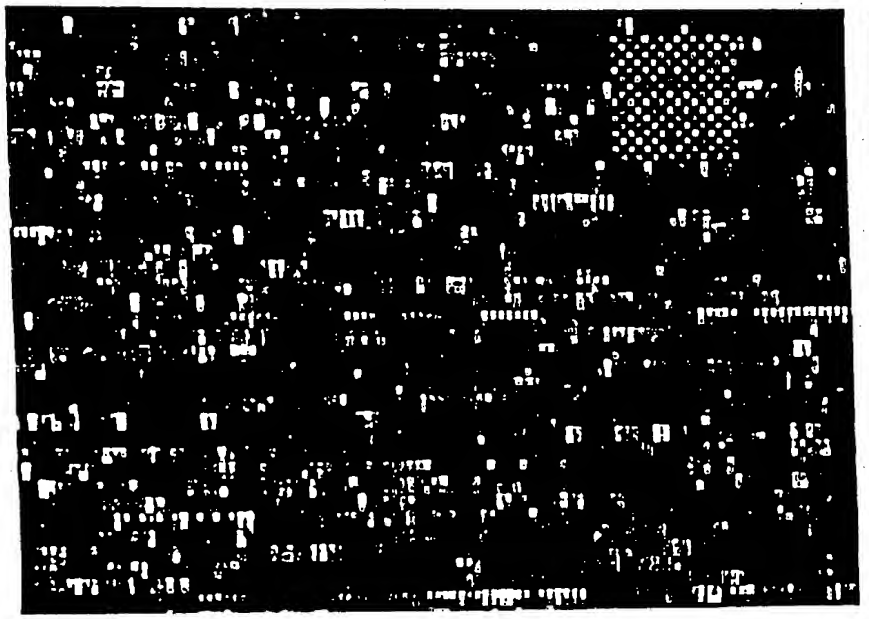
Gene Expression in Single Olfactory Sensory Neuron



Murine 11KsubA
P% = 18%

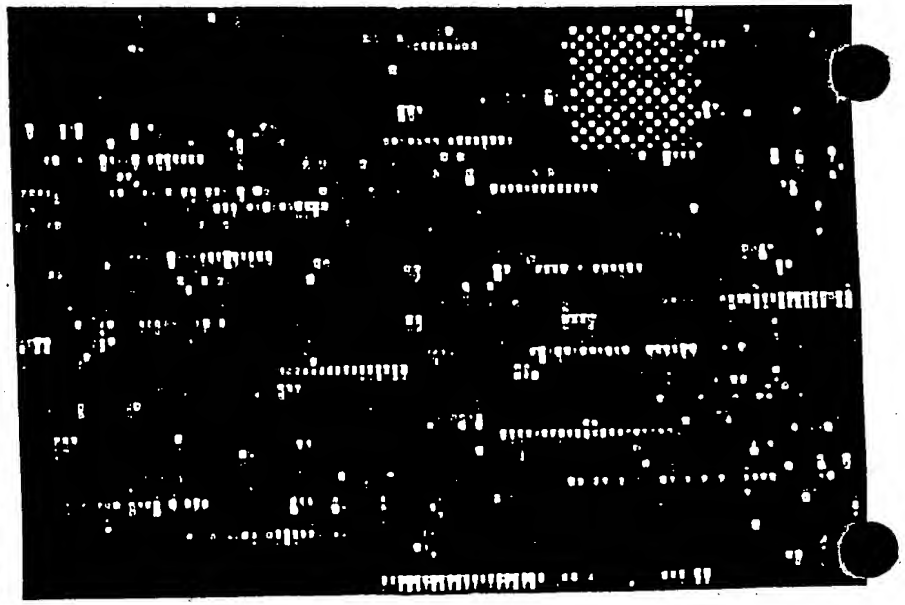
FIG. 1

Gene Expression in Main Olfactory Epithelium



Murine 11KsubA
P% = 35%

Gene Expression in Single Olfactory Sensory Neuron



Murine 11KsubA
P% = 18%

FIG. 2

Signature Molecules Expressed In Retina

Msa.2208 PDE

L36860 GCAP

X66196 Recoverin

M55171 Rhodopsin

Msa.1247.0Transducin

M24086 Arrestin

AF000149 ABCR

FIG. 3

Signature Molecules Expressed In A Photoreceptor Cell

Msa.2208 PDE

L36860 GCAP

X66196 Recoverin

M55171 Rhodopsin

Msa.1247.0Transducin

M24086 Arrestin

AF000149 ABCR

FIG. 4

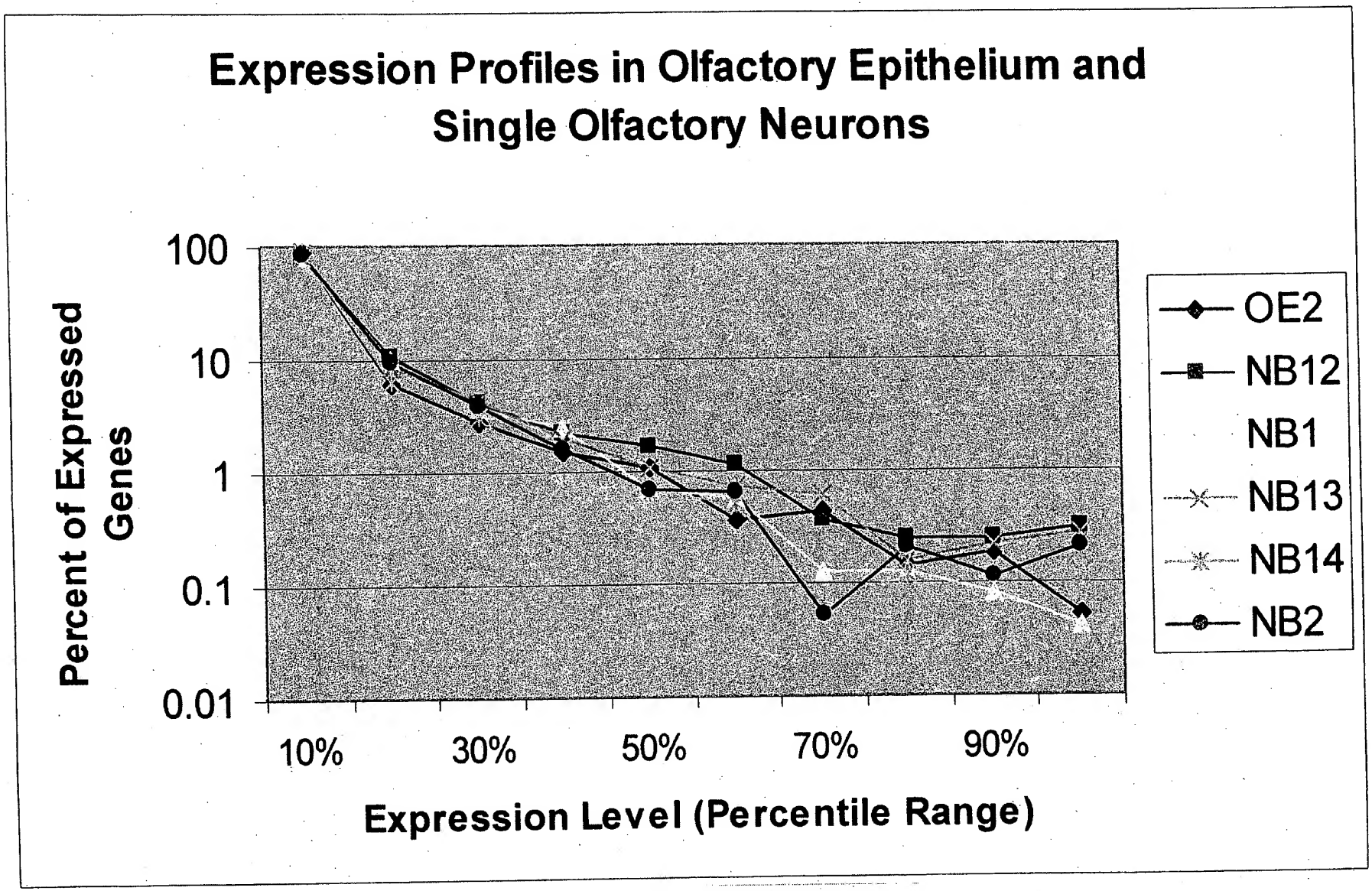


FIG. 5

Correllation of Gene Expression Profiles by Southern Blot and Microarray Hybridization

Gene	NB7	NB9	NB2	NB1	NB13	NB3	NB8	NB12	NB6
PCNA	++	+	++	~+					
GAP-43			+	++	+				
RGS-v					+		+		
Sox-11				++				+	
OMP	++	++	~+	++	++	++	++	++	++

Southern Blot

Probe Set	Gene	NB7	NB9	NB2	NB1	NB13	NB3	NB8	NB12	NB6
X53068_s_at	PCNA	5 A	42 A	784 P	97 P	45 A	-15 A	9 A	-14 A	-3 A
J02809_s_at	GAP-43	-197 A	-184 A	858 P	1053 P	354 P	-215 A	-10 A	1 A	-236 A
C78048_rc_at	RGS-v	19 A	-52 A	24 A	11 A	13348 P	-25 A	7801 P	185 A	-21 A
AF009414_g_at	Sox-11	-37 A	-26 A	-35 A	1086 P	-17 A	-58 A	-45 A	277 P	-43 A
Msa.245.0_at	OMP	-114 A	170 A	-181 A	-172 A	259 A	-415 A	63 A	250 A	332 A

Microarray

FIG. 6

	M					N					S			E			V		T		
	I-11	II-6	II-9	II-11	MOE6	NB2	NB7	NB8	2NB3	2NB9	NB10	2NB6	2NB10	1E4	1E6	4E7	SC16	SC26	MOE1	MOE2	HEART
I-11	1	0.66	0.68	0.69	0.71	0.53	0.57	0.63	0.5	0.49	0.4	0.51	0.53	0.1	0.15	0.33	0.57	0.6	0.42	0.48	0.24
II-6		1	0.69	0.68	0.75	0.46	0.58	0.56	0.46	0.51	0.38	0.5	0.45	0.11	0.15	0.32	0.58	0.6	0.39	0.45	0.24
II-9			1	0.67	0.73	0.46	0.55	0.55	0.46	0.5	0.37	0.51	0.47	0.12	0.18	0.36	0.64	0.66	0.4	0.45	0.24
II-11				1	0.7	0.5	0.57	0.61	0.51	0.47	0.44	0.54	0.54	0.12	0.16	0.32	0.6	0.63	0.39	0.47	0.22
MOE6					1	0.47	0.55	0.59	0.49	0.51	0.39	0.53	0.47	0.12	0.17	0.35	0.65	0.64	0.4	0.44	0.24
NB2						1	0.56	0.52	0.49	0.42	0.49	0.51	0.46	0.13	0.18	0.43	0.49	0.49	0.4	0.43	0.19
NB7							1	0.59	0.52	0.54	0.46	0.44	0.42	0.23	0.24	0.38	0.55	0.52	0.45	0.46	0.24
NB8								1	0.48	0.45	0.42	0.44	0.4	0.15	0.19	0.33	0.57	0.5	0.36	0.41	0.2
2NB3									1	0.56	0.38	0.48	0.42	0.26	0.24	0.35	0.47	0.48	0.37	0.41	0.18
2NB9										1	0.33	0.4	0.38	0.26	0.24	0.36	0.44	0.46	0.35	0.37	0.17
NB10											1	0.5	0.58	0.2	0.23	0.3	0.4	0.38	0.37	0.42	0.19
2NB6												1	0.56	0.18	0.23	0.33	0.51	0.51	0.33	0.39	0.18
2NB10													1	0.18	0.2	0.3	0.48	0.43	0.38	0.45	0.21
1E4														1	0.54	0.23	0.14	0.13	0.17	0.13	0.06
1E6															1	0.24	0.14	0.16	0.22	0.17	0.07
4E7																1	0.3	0.33	0.33	0.32	0.13
SC16																	1	0.67	0.35	0.4	0.22
SC26																		1	0.32	0.37	0.2
MOE1																			1	0.88	0.38
MOE2																				1	0.42
HEART																					1

0.55<=X
0.4<=X<0.54
0.25<X<0.39
x<0.25

FIG. 7

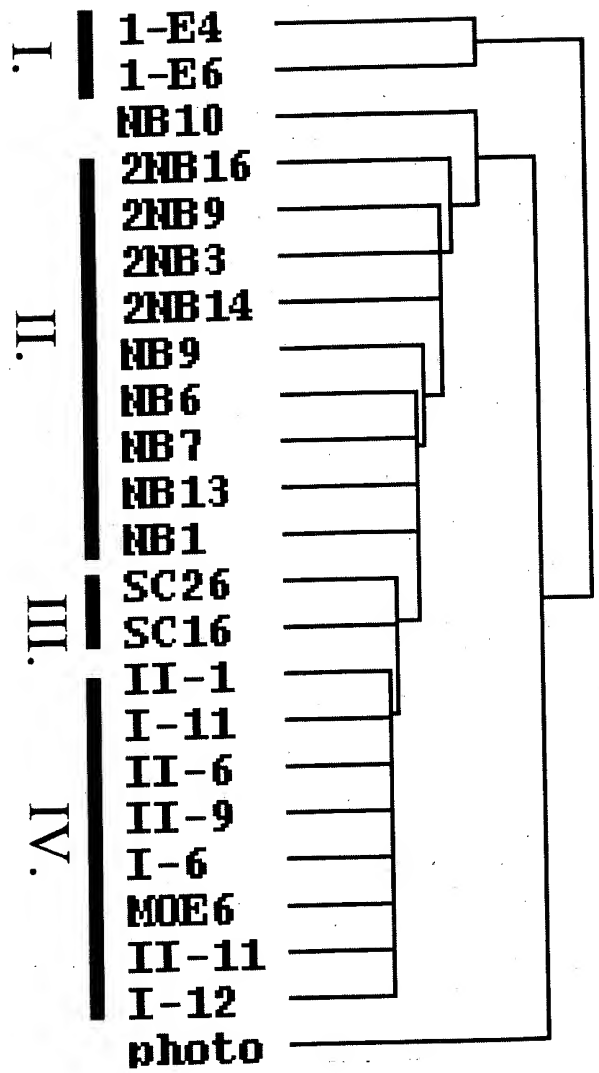
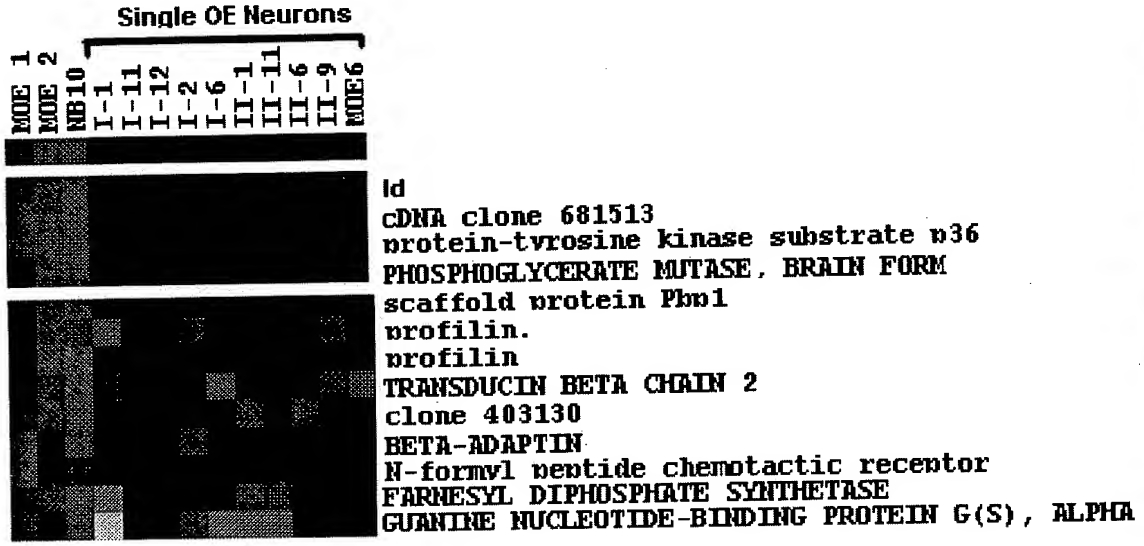

I.
II.
III.
IV.
1-E4
1-E6
NB10
2NB16
2NB9
2NB3
2NB14
NB9
NB6
NB7
NB13
NB1
SC26
SC16
II-1
I-11
II-6
II-9
I-6
MOE6
II-11
I-12
photo

FIG. 8

Fig. 9

Characteristic gene cluster identifying NB10 as a supporting cell



Id expression by supporting cells

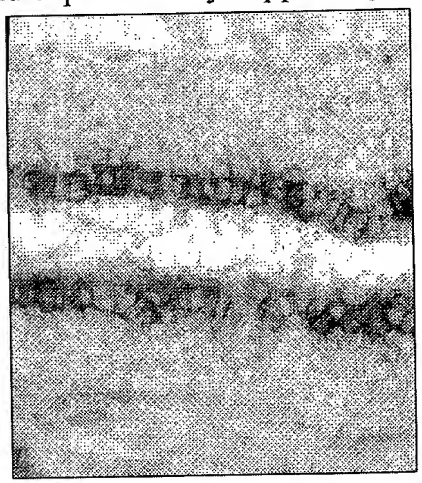
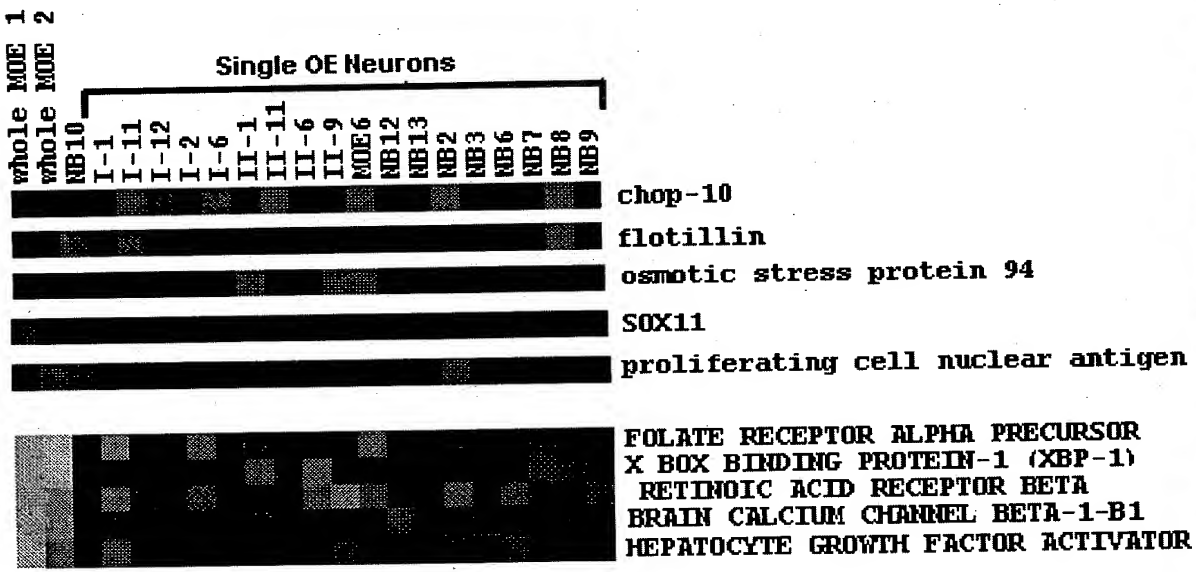


Fig. 10

Specific gene expression in individual neurons cannot be detected in transcripts from whole tissue and allows one to identify neuronal cell types



Chop 10 expression

Sox-11 expression